

AMENDMENTS TO THE SPECIFICATION:

Please add the following new paragraphs to the “Summary of the Invention” section of the application following paragraph [0017], as published (or after the third full paragraph on page 4 of the application as filed):

[0017.1] According to one aspect of the invention, there is provided a system for controlling switching fabrics in a communications switch platform having a data plane for processing data, including an active fabric having an ingress and an egress and establishing a first datapath, a redundant fabric having an ingress and an egress and establishing a second datapath, and a fabric switch selecting one of said fabrics to a system output, comprising: a control plane for monitoring said processing of data, including: (i) a plurality of monitors operatively connected to monitor the status of elements in said active and redundant fabrics in the data plane; and (ii) a first fabric activity switch circuit adapted to determine whether said fault occurred in said active fabric, and if so, to generate a fabric activity switch signal directed to said fabric switch to switch to said redundant fabric, whereby, the control plane receives data plane fabric status inputs from the data plane and effects control over said fabric switch, but otherwise operates independently of said data plane; a redundant fabric activity switch circuit which, in the event of failure of said first fabric activity switch circuit, is adapted to determine whether said fault occurred in said active fabric in the data plane, and if so, to generate a fabric activity switch signal directed to said fabric switch, whereby, redundant control is provided over said fabric switch; a plurality of redundant monitors operatively connected to monitor the status of said first fabric and said redundant fabric for a fault, whereby, redundant reporting paths are provided in the control plane for the status of said first and said redundant fabrics; and, wherein said plurality of monitors and redundant monitors comprise a pair of shelf controllers per shelf, and each monitor and each redundant monitor of each pair of shelf controllers is connected by respective control service links to a first inter-shelf I/O interface card and a second inter-shelf I/O interface card, respectively, whereby shelf status information is provided across shelves to redundant I/O interfaces. The

system may further include first and second inter-shelf management cards, each of said first and second inter-shelf management cards being cross-connected to each of said first and second inter-shelf I/O interface cards, whereby, multiple redundant paths may be provided between said pairs of shelf controllers and said inter-shelf management cards. The system may further include first and second fabric activity switch control cards, each of said first and second fabric activity switch control cards being cross-connected to each of said first and second inter-shelf management cards, whereby, multiple redundant paths may be provided between said pairs of shelf controllers and said fabric activity switch control cards. The system may further include a fabric override input adapted to generate a fabric activity switch signal directed to said fabric switch in the data plane, whereby, the selection of a fabric by the fabric activity switch circuit may be overridden. The system may further include a fabric override input adapted to generate a fabric activity switch signal directed to said fabric switch in the data plane, whereby, the selection of a fabric by the fabric activity switch circuit may be overridden. And, the system may further include a fabric override input adapted to generate a fabric activity switch signal directed to said fabric switch in the data plane, whereby, the selection of a fabric by the fabric activity switch circuit may be overridden.

[0017.2] According to another aspect of the invention, there is provided a system for controlling switching fabrics in a communications switch including a plurality of input/output (“I/O”) shelves interfacing with a first switching fabric and a second switching fabric, for selecting one of said first and second fabrics as an active switching fabric, comprising: an I/O monitor provided in an access interface between each I/O shelf and the first and second switching fabrics, respectively, for generating respective first and second fabric status signals indicative of a fault on the access interface; means in the first and second fabrics for generating respective first and second switching fabric status signals, indicative of a fault in one of the first and second switching fabrics, respectively; and, a fabric activity switch circuit for selecting the first switching fabric as the active switching fabric if a fault is detected in the second switching fabric based on the first and second fabric status signals and the first and second switching fabric status signals. The system may further include an interface, coupled to the fabric activity switch circuit, for receiving at least

one of an override signal for overriding the selecting of the active switching fabric and a select signal for directing the selecting of the active switching fabric. In the system, at least one of the override and select signals may be provided by a control terminal. And, the selecting of the active switching fabric may occur in under 60 milliseconds.

[0017.3] According to another aspect of the invention, there is provided a fabric activity switch circuit for a communications switch, the communications switch including at least one input/output (“I/O”) device coupled to each of first and second switching fabrics, the circuit comprising: a first interface for receiving first and second I/O status signals from the at least one I/O device, the first and second I/O status signals being indicative of respective faults in the first and second switching fabrics and being generated by respective monitors provided in the at least one I/O device; a second interface for receiving first and second fabric status signals from the first and second switching fabrics, respectively, the first and second fabric status signals being indicative of respective faults in the first and second switching fabrics and being generated by respective monitors provided in the first and second switching fabrics; gates coupled to the first and second interfaces for generating an output signal for selecting the first switching fabric as an active switching fabric if a combination of the second I/O and fabric status signals indicate a fault in the second switching fabric and for selecting the second switching fabric as the active switching fabric if a combination of the first I/O and fabric status signals indicate a fault in the first switching fabric. The fabric activity switch circuit may further include a third interface coupled to the gates for transmitting the output signal to a fabric switch for switching between the first and second switching fabrics. The fabric activity switch circuit may further include redundant gates and redundant first, second, and third interfaces to improve reliability. The fabric activity switch circuit may further include a fourth interface, coupled to the gates, for receiving at least one of an override signal for overriding the selecting of the active switching fabric and a select signal for directing the selecting of the active switching fabric. In the fabric activity switch circuit, at least one of the override and select signals may be provided by a control terminal. And, the switching between the first and second switching fabrics may occur in under 60 milliseconds.